

IN THE CLAIMS

1. (Original) A biological substance-immobilized gel which comprises a gel containing 2%-7% by mass of N,N-dimethylacrylamide and a biological substance immobilized on and/or in the gel.
2. (Original) A biological substance-immobilized gel which comprises a gel having the following composition and a biological substance immobilized on and/or in the gel:
  - (a) N,N-dimethylacrylamide 2% to 7% by mass
  - (b) cross-linking agent 0.1% to 1.5% by mass.
3. (Original) The biological substance-immobilized gel according to claim 1 or 2, wherein the biological substance is a nucleic acid.
4. (Currently Amended) The biological substance-immobilized gel according to claim 2 [[or 3]], wherein the cross-linking agent is a multifunctional monomer having at least two ethylenically unsaturated bonds.
5. (Original) The biological substance-immobilized gel according to claim 4, wherein the cross-linking agent is methylenebisacrylamide.
6. (Original) A method for preparing a biological substance-immobilized gel, which comprises immobilizing a biological substance on and/or in a gel containing 2%-7% by mass of N,N-dimethylacrylamide.

7. (Original) The method according to claim 6, wherein the gel is obtained by reacting 2%-7% by mass of N,N-dimethylacrylamide in the presence of 0.1%-1.5% by mass of a cross-linking agent.
8. (Withdrawn) A gel-filled hollow tube which comprises a hollow tube whose hollow space is filled with the biological substance-immobilized gel according to any one of claims 1 to 5.
9. (Withdrawn) The gel-filled hollow tube according to claim 8, wherein the hollow tube is a hollow fiber.
10. (Withdrawn) A method for manufacturing a biological substance-immobilized gel microarray, which comprises allowing a plurality of gel-filled hollow tubes according to claim 8 or 9 to be tied in a bundle and cutting the resulting tube bundle in a direction intersecting with the longitudinal direction of the tubes.
11. (Withdrawn) A method for manufacturing a biological substance-immobilized gel microarray, which comprises the following steps:
- (1) allowing a plurality of hollow tubes to be tied in a bundle;
  - (2) filling the biological substance-immobilized gel according to any one of claims 1 to 5 into the hollow space of each tube in the resulting tube bundle; and
  - (3) cutting the tube bundle in a direction intersecting with the longitudinal direction of the tubes.

12. (Withdrawn-Currently Amended) A biological substance-immobilized gel microarray which comprises the biological substance-immobilized gel according to ~~any one of claims 1 to 5~~ claim 1, wherein the gel is arranged in multiple compartments.
13. (Withdrawn) The biological substance-immobilized gel microarray according to claim 12, wherein the surface area of each compartment is  $10^{-6}$  m<sup>2</sup> or less.
14. (Withdrawn) The biological substance-immobilized gel microarray according to claim 12 or 13, wherein the compartments are formed by slots or through holes.
15. (Withdrawn) A biological substance-immobilized gel microarray which is obtained by allowing a plurality of gel-filled hollow tubes according to claim 8 or 9 to be tied in a bundle and cutting the tube bundle in a direction intersecting with the longitudinal direction of the tubes.
16. (Withdrawn) The biological substance-immobilized gel microarray according to claim 15, wherein the hollow tubes are hollow fibers.
17. (Withdrawn) A method for detecting a target to be measured, which comprises reacting an analyte with the microarray according to any one of claims 12 to 16 and detecting the target in the analyte.
18. (Withdrawn) The method according to claim 17, wherein the target to be measured is a nucleic acid.

19. (Withdrawn) The method according to claim 18, wherein the nucleic acid is 100 nucleotides or less in length.
20. (New) The biological substance-immobilized gel according to claim 3, wherein the cross-linking agent is a multifunctional monomer having at least two ethylenically unsaturated bonds.
21. (New) The biological substance-immobilized gel according to claim 1, which comprises a gel containing 2%-5% by mass of N,N-dimethylacrylamide.
22. (New) The biological substance-immobilized gel according to claim 1, which yields uniform distribution and fluorescent intensity when the biological substance immobilized on and/or in the gel is hybridized with a probe labeled with a fluorescent marker.